Babcock & Wilcox

Annual Report

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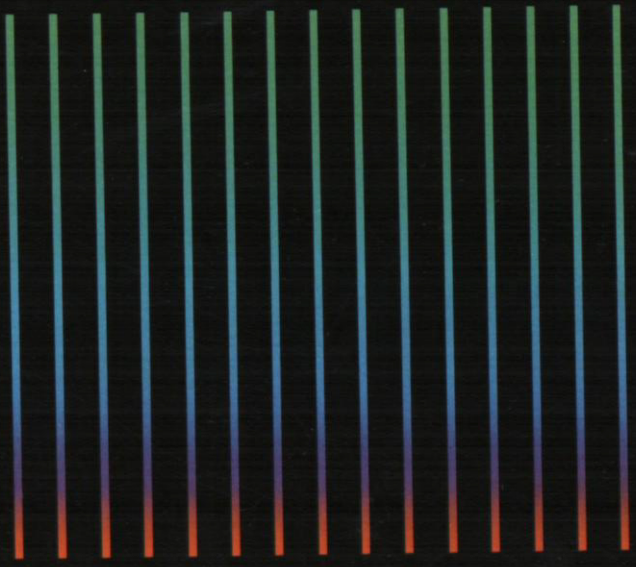

The Babcock & Wilcox Company

Ninetieth Annual Report
for the year ended December 31, 1970

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Opposite: Nuclear fuel assemblies at the Power Generation division's commercial nuclear fuel plant in Lynchburg, Virginia, await shipment to Duke Power Company's nuclear generating station under construction near Clemson, South Carolina.

1970 Highlights

TOTALS	**1970**	1969
Orders received	**$1,118,298,000**	$ 812,758,000
Unfilled orders	**2,039,661,000**	1,747,787,000
Sales (on percentage of completion method for long-term contracts)	**826,424,000**	718,566,000
Net income for the year	**10,021,000**	5,725,000
Cash dividends declared	**8,810,000**	16,752,000
Expenditures for property, plant and equipment	**25,340,000**	50,523,000
Depreciation of plant and equipment	**16,417,000**	13,439,000
Working capital	**128,355,000**	141,205,000
Stockholders' equity	**278,427,000**	277,216,000
Number of employees at year end	**36,528**	35,118
Number of common stockholders at year end	**33,440**	31,419
Number of common shares issued at year end	**12,366,626**	12,366,626
PER COMMON SHARE ISSUED*		
Net income for the year	**$ .81**	$ .46
Cash dividends declared	**.72**	1.36
Stockholders' equity	**22.51**	22.42

*Shares issued were unchanged during the periods.

To the Stockholders of The Babcock & Wilcox Company:

Earnings for 1970 were $10,021,000 or $.81 per share on shipments of $826,424,000 compared with 1969 earnings of $5,725,000 or $.46 per share on shipments of $718,566,000. Improved results for 1970, as compared with 1969, were achieved primarily by a reduction in nuclear losses. Except for this activity, all company units operated profitably with some establishing new records.

Despite the general decline in the economy in the latter part of the year, shipments for the company as a whole exceeded those for 1969. All company divisions and subsidiaries, except for Automated Machine, contributed to this increase, with the largest share coming from steam generating equipment. The approximate distribution of 1970 and 1969 shipments by markets was as follows:

	1970	1969
Electric Utilities	49%	40%
Government	15	18
Machinery	7	9
Warehouse and Distributors	7	9
Transportation	5	6
Pulp and Paper	4	4
Primary Metals	4	4
Fabricated Metal Products	2	3
Chemical and Petroleum	2	2
Miscellaneous	5	5
	100%	100%

The company competed aggressively during the year for available business and many significant orders were received. The year was a lean one for automated machinery and typifies the experience of the entire machine tool industry. In the last quarter there was a noticeable decrease in demand for refractories and tubular products, resulting from the general economic decline. The specialty steel tubing industry, of which we are a part, is also feeling the effects of low-cost imports. This is a situation of concern not only to the industry but to the nation as a whole and will require close public attention.

Primarily as a result of higher nuclear bookings, the backlog of orders rose to $2,039,661,000 at year end compared with $1,747,787,000 a year ago. Substantially all of the backlog consists of steam generating and associated equipment. Of the current backlog, it is expected that approximately 36% will be recorded as sales in 1971, approximately 50% in 1972 through 1974 and approximately 14% (principally nuclear fuel) thereafter.

Steps taken in the past two years to improve performance of the Power Generation division are proving to be effective. No further delays in production of nuclear steam supply systems were experienced in 1970 and in certain cases improvements in productivity and schedules are apparent. During the year seven nuclear pressure vessels were shipped from Mount Vernon compared with three in 1969. The division is now actively seeking additional work for this plant.

The first shipment of fuel from the company's new commercial nuclear fuel plant at Lynchburg, Va., was made in December 1970 to the Oconee station of Duke Power Company in South Carolina. The start-up of the Oconee installation which is scheduled in 1971 will be a significant event in demonstrating full scale performance of B&W's nuclear steam generating system.

There was a noticeable pickup in ordering of nuclear steam supply systems by public utilities in 1970. B&W was awarded a $174,000,000 order by the Tennessee Valley Authority for two 1200 megawatt units including fuel. Babcock & Wilcox Canada Ltd. also received a large order from Ontario Hydro covering components for the Bruce Nuclear Steam Generating Station.

It is expected that U.S. utilities will further increase ordering of nuclear units in 1971. It is significant however that the bright picture for nuclear power is being dimmed by delays in completion and start-up of new plants caused by protracted administrative proceedings resulting from public hearings and intervention. The electric utility industry, its suppliers, and the regulatory commissions are fully committed to the need for safety and environmental protection and have taken steps to insure that proper standards will be met. They are faced with criticism which, if carried to its conclusion, could seriously affect the construction of many power plants, both fossil fuel and nuclear. We believe that in the long run common sense will prevail and the nation will build the plants essential for its well being and safety. In the interim, we cannot predict the effect on our business, either in terms of orders or the pace of production for equipment now on order, of long delays in start-up of individual plants.

In other areas of nuclear activity, the company was awarded a large volume of business for nuclear components and fuel for the Navy. B&W also received a one-year contract from the Maritime Administration covering a study to determine the design and cost of a competitive marine nuclear propulsion system in the 100,000 horsepower range—about four times that of the average merchant ship.

B&W is actively involved in pollution control. It has faced up to the problem in its own plants and is presently installing or has in operation equipment for the control of gaseous and liquid effluents from its facilities. B&W is also developing products which are useful to others in their efforts to reduce pollution, notably our new boiler design for the pulp and paper industry. Several research and development projects are underway, in cooperation with utilities and governmental agencies, to find practical methods for removing sulphur compounds from stack gases.

After a three week strike at the beginning of the year, a long term labor contract was signed covering six Power Generation division plants. This has brought a relative measure of stability to our major area of production activity. There were no other major work stoppages during the year and new contracts were negotiated with unions in various divisions.

William L. Wearly, chairman and chief executive officer of Ingersoll-Rand Company was elected a director in December 1970 and James C. Parlee, senior executive vice president of The International Nickel Company of Canada, Ltd. was elected a director in February 1971. J. Roy Gordon, a director since 1957, and Walther H. Feldmann, a director since 1959, were named honorary directors.

Alfred Iddles, president of B&W from 1948 to 1957, died on September 23, 1970. Mr. Iddles was one of the pioneers in atomic energy in the United States and the nation is indebted to him for his initiative and foresight.

In November, the company acquired approximately 15% of the ordinary shares of Babcock & Wilcox Limited, London, England. The two firms have had a long term technical aid agreement and this investment will provide a better basis for participation in world markets.

The outlook is for continued improvement of performance in 1971. Although we will still experience losses in atomic energy activity it is expected that such losses will continue to be reduced and will be appreciably lower than those recorded in 1970. There may be possible additional costs and expenses, including claims, resulting from delays in the atomic energy business, although management does not expect that amounts, if any, will be material. Major uncertainties in 1971 include the trend of economic activity and the fact that we are also facing negotiations for a new contract in the steel industry. The present contract expires July 31, 1971 and should there be a lengthy strike, it would adversely affect our Tubular Products division and many of our other operations as well as those of our customers and suppliers.

Subject to the factors discussed in this letter, we expect that the results for 1971 will show a strong improvement over those attained in 1970.

The continuing recovery in the company's performance has been made possible by the untiring efforts of many employees at all levels. They deserve our commendation and thanks. We are particularly appreciative of the support of our many customers and our more than 33,000 stockholders.

George G. Zipf, President and Chief Executive Officer

George G. Zipf

George G. Zipf
President and Chief Executive Officer

February 25, 1971

Consolidated Statement of Income and Retained Earnings

	For the Calendar Year	
	1970	1969
Sales (on percentage of completion method for long-term contracts)	**$826,424,077**	$718,565,944
Costs and expenses:		
Costs and operating expenses	**743,000,306**	653,373,912
Selling, general and administrative expenses	**39,778,914**	36,737,530
Depreciation of plant and equipment (Note 4)	**16,417,346**	13,438,534
	799,196,566	703,549,976
Income from operations	**27,227,511**	15,015,968
Income from investments and marketable securities	**1,459,549**	505,447
Interest expense	**(11,449,022)**	(9,022,854)
Income before taxes and minority interests	**17,238,038**	6,498,561
U.S. and foreign taxes on income (Notes 2 and 4)	**6,390,000**	190,000
	10,848,038	6,308,561
Income applicable to minority interests	**(826,921)**	(583,803)
Net income for the year (per share: 1970—$.81; 1969—$.46) (Note 3)	**10,021,117**	5,724,758
Cash dividends declared (per share: 1970—$.72; 1969—$1.36)	**8,810,050**	16,752,000
Remainder, to retained earnings	**1,211,067**	(11,027,242)
Retained earnings at beginning of year	**194,884,510**	205,911,752
Retained earnings at end of year	**$196,095,577**	$194,884,510

Consolidated Statement of Source and Application of Funds

	For the Calendar Year	
	1970	1969
WORKING CAPITAL AT BEGINNING OF YEAR	**$141,204,771**	$214,728,409
SOURCES:		
Net income	**10,021,117**	5,724,758
Depreciation	**16,417,346**	13,438,534
Net increase in noncurrent indebtedness	**1,300,000**	
Net increase in noncurrent deferred income taxes	**3,900,000**	5,015,000
	31,638,463	24,178,292
APPLICATIONS:		
Additions to property, plant and equipment	**25,339,980**	50,523,415
Cash dividends declared	**8,810,050**	16,752,000
Net decrease in noncurrent indebtedness		31,200,000
Change in investments	**9,510,574**	
Other, net	**827,147**	(773,485)
	44,487,751	97,701,930
NET DECREASE IN WORKING CAPITAL	**(12,849,288)**	(73,523,638)
WORKING CAPITAL AT END OF YEAR	**$128,355,483**	$141,204,771

Consolidated Balance Sheet

ASSETS

	At December 31	
	1970	1969
CURRENT ASSETS		
Cash	**$ 26,520,858**	$ 13,548,645
Marketable securities, at cost (approximate market)	**496,547**	1,912,761
Accounts receivable	**131,451,581**	113,877,797
Unbilled sales	**95,779,025**	84,578,157
Inventories, including long-term contract costs (less advance payments on contracts) (Note 2)	**162,000,990**	170,151,565
TOTAL CURRENT ASSETS	**416,249,001**	384,068,925
NONCURRENT RECEIVABLES	**1,191,299**	1,348,245
INVESTMENTS, at cost	**9,851,066**	340,492
PROPERTY, PLANT AND EQUIPMENT, at cost less accumulated depreciation and amortization (Note 4)	**211,290,845**	202,647,504
PREPAID EXPENSES AND OTHER ASSETS	**6,420,524**	4,566,447
TOTAL ASSETS	**$645,002,735**	$592,971,613

LIABILITIES AND STOCKHOLDERS' EQUITY

	1970	1969
CURRENT LIABILITIES		
Notes payable (Note 5)	**$ 81,930,346**	$ 86,339,851
Accounts payable and accrued liabilities	**176,437,209**	139,366,858
Cash dividends payable	**1,540,400**	4,188,696
U.S. and foreign income taxes	**27,985,563**	12,968,749
TOTAL CURRENT LIABILITIES	**287,893,518**	242,864,154
NONCURRENT INDEBTEDNESS (Note 5)	**57,300,000**	56,000,000
DEFERRED INCOME TAXES	**12,840,000**	8,940,000
MINORITY INTERESTS IN SUBSIDIARY COMPANIES	**8,542,213**	7,951,522
TOTAL LIABILITIES	**366,575,731**	315,755,676
STOCKHOLDERS' EQUITY		
Capital Stock:		
Preferred, cumulative, no par; authorized and unissued 2,000,000 shares		
Common, par value $4.50; authorized 18,000,000 shares, issued 12,366,626 shares (amounts include $26,681,610 excess over par value-capital surplus)	**82,331,427**	82,331,427
Retained earnings	**196,095,577**	194,884,510
TOTAL STOCKHOLDERS' EQUITY	**278,427,004**	277,215,937
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	**$645,002,735**	$592,971,613

Notes to Consolidated Financial Statements

Note 1—The financial statements include The Babcock & Wilcox Company and all subsidiary companies. The accounts of foreign subsidiaries have been translated into U.S. dollars at current rates of exchange, except for property, plant and equipment which has been translated at appropriate historical rates.

Note 2—The consolidated inventories at December 31 are summarized below:

	1970	1969
Raw materials and supplies	$ 65,734,000	$ 73,423,000
Work in process	137,517,000	140,245,000
Finished products	10,663,000	9,147,000
	213,914,000	222,815,000
Less: Advance payments	51,913,000	52,663,000
	$162,001,000	$170,152,000

Inventories are stated generally at the lower of cost or market. Other than for long-term contracts, cost is determined on the average or first-in, first-out basis for raw materials and supplies and accumulated production costs for work in process and finished products.

With respect to long-term contracts, the company records sales and cost of sales by the percentage of completion method related principally to shipments or, in the case of nuclear contracts, to incurred direct labor. The costs recorded on uncompleted individual long-term contracts within each fiscal period are based upon estimates to complete. Cost estimates are reviewed periodically as the work progresses and adjustments, if any, proportionate to the percentage of completion are reflected in the period when such estimates are revised.

The completed contract method is followed for income tax purposes and provision is made currently for tax payments thereby delayed (1970—$8,202,000; 1969—$8,963,000).

Note 3—Results for 1970 and 1969 reflect costs and expenses incurred from certain actions taken to alleviate delays and the effects of delays in carrying out some long-term nuclear contracts. Additional costs and expenses, including claims, may result from delays but management does not expect that amounts, if any, will be material.

Note 4—Fixed assets which are carried at cost less accumulated depreciation may be summarized as follows:

	1970	1969
Land	$ 5,627,000	$ 5,353,000
Buildings	117,515,000	110,925,000
Machinery and Equipment	276,269,000	251,003,000
Construction in progress	7,274,000	16,074,000
	406,685,000	383,355,000
Accumulated depreciation	195,394,000	180,707,000
	$211,291,000	$202,648,000

For financial accounting purposes, the company follows the straight line method of computing depreciation while following accelerated methods for income tax purposes with appropriate deferral of income tax (1970—$3,900,000; 1969—$5,015,000).

Provisions for federal taxes on income reflect deductions for the tax investment credit of $951,000 in 1970 and $2,021,000 in 1969.

Note 5—Consolidated obligations consisted of the following:

	1970	1969
Current:		
Commercial paper	$ 8,600,000	$ 21,613,000
Line of credit	61,000,000	55,000,000
Other	12,330,000	9,727,000
	81,930,000	86,340,000
Noncurrent:		
Bank loan agreements	40,000,000	46,000,000
Notes payable	7,800,000	10,000,000
Eurodollar note	9,500,000	—
	57,300,000	56,000,000
	$139,230,000	$142,340,000

The company has the option to borrow at prime rate up to an aggregate of $150,000,000 from several banks under a bank loan agreement or on a line of credit. At December 31, 1970 and 1969, $101,000,000 of this amount was borrowed. The outstanding amounts borrowed under the bank loan agreement are convertible upon election of the company prior to June 30, 1972 into term loans payable quarterly over a 36 month period with interest at ¼ of 1% in excess of the prime rate.

The Eurodollar obligation represents maximum borrowings under an arrangement which expires November 4, 1975.

Certain of the agreements contain, among other things, requirements as to consolidated working capital, as defined, and dividend declarations. At December 31, 1970 and 1969, all such requirements have been met.

Note 6—The company has several pension plans, principally non-contributory, covering substantially all employees. The total pension expense funded and charged to income was $11,307,000 in 1970 and $8,366,000 in 1969 which include amortization of prior service costs over a period of forty years. The unfunded prior service costs were approximately $56,400,000 at December 31, 1970 and $40,000,000 at December 31, 1969.

Note 7—Transactions in 1970 under the stock option plans approved by the stockholders in 1958 and 1963 are summarized as follows:

	Shares	
	1958 Plan	1963 Plan
Options outstanding on January 1, 1970	25,704	207,600
Options granted	—	—
Options exercised	(3,296)	—
Options lapsed	(4,946)	(5,966)
Options outstanding on December 31, 1970	17,462	201,634

No further options may be granted under either plan.

Opinion of Independent Accountants

To the Stockholders and Directors of
The Babcock & Wilcox Company:

In our opinion, the accompanying consolidated balance sheet and statements of income and retained earnings and source and application of funds present fairly the financial position of The Babcock & Wilcox Company and its subsidiaries at December 31, 1970, the results of their operations and the supplementary information on funds for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Our examination of these statements was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

PRICE WATERHOUSE & CO.

New York, N.Y., February 5, 1971

Income and Retained Earnings

Ten-Year Comparison (in thousands of dollars) For the Calendar Year	**1970**	1969	1968	1967
Sales (on percentage of completion method for long-term contracts)	**$826,424**	$718,566	$647,613	$624,723
Costs and expenses except depreciation	**782,779**	690,111	584,522	545,935
Depreciation and amortization	**16,417**	13,439	10,934	16,436
	799,196	703,550	595,456	562,371
Income from operations	**27,228**	15,016	52,157	62,352
Income from investments and marketable securities	**1,459**	505	928	305
Interest expense	**(11,449)**	(9,022)	(3,391)	(1,412)
Income before taxes and minority interests	**17,238**	6,499	49,694	61,245
U.S. and foreign taxes on income	**6,390**	190	23,710	27,260
	10,848	6,309	25,984	33,985
Income applicable to minority interests	**(827)**	(584)	(742)	(770)
Net income for the year	**10,021**	5,725	25,242	33,215
Equity in earnings of subsidiary prior to obtaining majority control				
	10,021	5,725	25,242	33,215
Cash dividends declared	**8,810**	16,752	16,726	16,681
Remainder, to retained earnings	**1,211**	(11,027)	8,516	16,534
Retained earnings at beginning of year	**194,884**	205,911	197,395	180,861
Retained earnings at end of year	**$196,095**	$194,884	$205,911	$197,395

Source and Application of Funds

Ten-Year Comparison (in thousands of dollars) For the Calendar Year	**1970**	1969	1968	1967
WORKING CAPITAL AT BEGINNING OF YEAR	**$141,205**	$214,728	$180,735	$156,721
SOURCES:				
Net income	**10,021**	5,725	25,242	33,215
Depreciation and amortization	**16,417**	13,439	10,934	16,436
Net increase in noncurrent indebtedness	**1,300**		44,800	25,800
Net increase in noncurrent deferred income taxes	**3,900**	5,015	3,925	
Working capital of subsidiary initially consolidated				
	31,638	24,179	84,901	75,451
APPLICATIONS:				
Additions to property, plant and equipment	**25,340**	50,523	37,388	33,509
Cash dividends declared	**8,810**	16,752	16,726	16,681
Net decrease in noncurrent indebtedness		31,200		
Net increase (decrease) in noncurrent receivables	**(157)**	(669)	(1,612)	1,547
Change in investments	**9,511**		(1)	(106)
Other (net)	**984**	(104)	(1,593)	(194)
	44,488	97,702	50,908	51,437
NET INCREASE (DECREASE) IN WORKING CAPITAL	**(12,850)**	(73,523)	33,993	24,014
WORKING CAPITAL AT END OF YEAR	**$128,355**	$141,205	$214,728	$180,735

Statistics

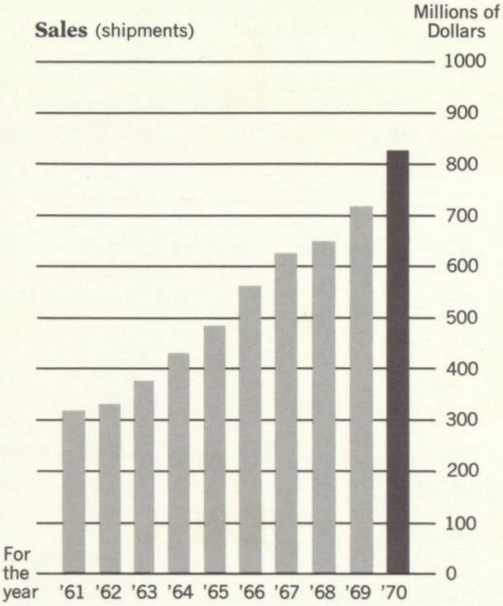
	1970	1969	1968	1967
Income from operations before taxes—% of sales	**3.3%**	2.1%	8.1%	10.0%
Net income for year—% stockholders' equity first of year	**3.6%**	2.0%	9.0%	12.6%
Orders received—thousands of dollars	**$1,118,298**	$ 812,758	$ 911,082	$1,099,295
Unfilled orders—thousands of dollars	**$2,039,661**	$1,747,787	$1,653,595	$1,390,127
Common shares issued end of year	**12,366,626**	12,366,626	12,366,626	12,366,626
Per common share issued (adjusted for stock split—12,366,626 shares):				
Income for year	**$ .81**	$ .46	$ 2.04	$ 2.69
Cash dividends declared	**.72**	1.36	1.36	1.36
Stockholders' equity	**22.51**	22.42	23.31	22.62

1966	1965	1964	1963	1962	1961
$561,627	$481,600	$430,957	$377,684	$330,574	$319,353
485,628	412,487	370,335	321,392	277,245	268,721
14,778	13,519	12,825	11,227	10,335	8,673
500,406	426,006	383,160	332,619	287,580	277,394
61,221	55,594	47,797	45,065	42,994	41,959
2,095	1,461	2,224	2,035	2,068	2,283
(838)	(715)	(750)	(834)	(952)	(1,120)
62,478	56,340	49,271	46,266	44,110	43,122
28,710	26,060	23,480	24,240	23,000	22,580
33,768	30,280	25,791	22,026	21,110	20,542
(766)	(830)	(595)	(279)	(250)	(301)
33,002	29,450	25,196	21,747	20,860	20,241
		1,030			
33,002	29,450	26,226	21,747	20,860	20,241
15,313	13,458	12,211	10,480	9,759	8,849
17,689	15,992	14,015	11,267	11,101	11,392
163,172	147,180	133,165	121,898	110,797	99,405
$180,861	$163,172	$147,180	$133,165	$121,898	$110,797

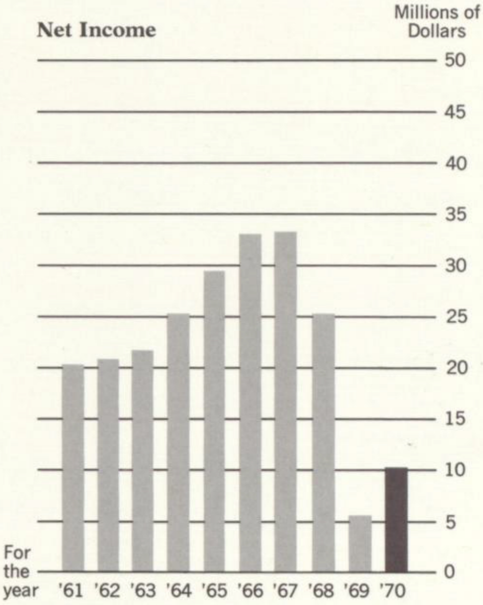
1966	1965	1964	1963	1962	1961
$163,400	$137,710	$119,851	$129,873	$146,524	$137,164
33,002	29,450	25,196	21,747	20,860	20,241
14,778	13,519	12,825	11,227	10,335	8,673
		5,084			
47,780	42,969	43,105	32,974	31,195	28,914
34,807	19,610	12,265	23,101	25,662	6,188
15,313	13,458	12,211	10,480	9,759	8,849
2,200		2,200	2,200	2,200	4,400
1,695	(13,535)	(1,877)	6,072	9,727	
(514)	(317)	(1,343)	1,753	(176)	321
958	(1,937)	1,790	(610)	674	(204)
54,459	17,279	25,246	42,996	47,846	19,554
(6,679)	25,690	17,859	(10,022)	(16,651)	9,360
$156,721	$163,400	$137,710	$119,851	$129,873	$146,524

1966	1965	1964	1963	1962	1961
10.9%	11.5%	11.1%	11.9%	13.0%	13.1%
13.4%	12.8%	11.7%	10.6%	10.8%	11.1%
$840,064	$651,195	$525,814	$398,990	$348,907	$361,285
$915,555	$637,118	$467,523	$372,666	$351,360	$333,027
12,366,626	12,366,626	12,366,626	6,183,313	6,183,313	6,183,313
$ 2.67	$ 2.38	$ 2.04	$ 1.76	$ 1.69	$ 1.64
1.25	1.10	1.00	.86	.80	.73
21.28	19.85	18.56	17.43	16.51	15.62

Sales (shipments)

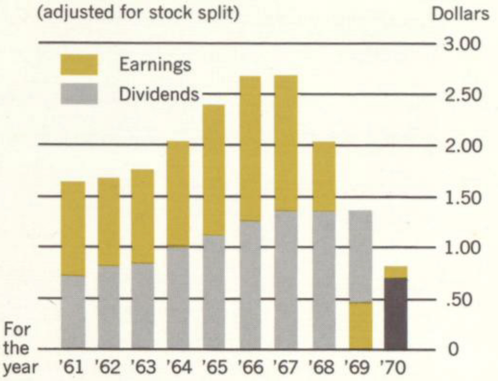


Net Income



Earnings per Share and Cash Dividends Declared per Share

(adjusted for stock split)



Balance Sheets

Ten-Year Comparison (in thousands of dollars)

At December 31	1970	1969	1968	1967
ASSETS				
CURRENT ASSETS				
Cash	**$ 26,521**	$ 13,549	$ 16,199	$ 12,839
Marketable securities	**496**	1,912	1,266	5,297
Accounts receivable	**131,452**	113,878	98,985	85,525
Unbilled sales	**95,779**	84,578	67,071	47,841
Inventories, net of advance payments	**162,001**	170,152	160,300	138,625
TOTAL CURRENT ASSETS	**416,249**	384,069	343,821	290,127
NONCURRENT RECEIVABLES	**1,191**	1,348	2,017	3,629
INVESTMENTS	**9,851**	340	340	341
PROPERTY, PLANT AND EQUIPMENT	**211,291**	202,648	165,638	139,415
PREPAID EXPENSES AND OTHER ASSETS	**6,421**	4,567	4,217	5,157
TOTAL ASSETS	**$645,003**	$592,972	$516,033	$438,669
LIABILITIES AND STOCKHOLDERS' EQUITY				
CURRENT LIABILITIES				
Notes payable	**$ 81,930**	$ 86,340	$ 6,761	$ 3,658
Accounts payable and accrued liabilities	**176,438**	139,367	98,229	80,281
Cash dividends payable	**1,540**	4,188	4,184	4,176
U.S. and foreign income taxes	**27,986**	12,969	19,919	21,277
TOTAL CURRENT LIABILITIES	**287,894**	242,864	129,093	109,392
NONCURRENT INDEBTEDNESS	**57,300**	56,000	87,200	42,400
DEFERRED INCOME TAXES	**12,840**	8,940	3,925	
MINORITY INTERESTS IN SUBSIDIARY COMPANIES	**8,542**	7,952	7,572	7,150
TOTAL LIABILITIES	**366,576**	315,756	227,790	158,942
STOCKHOLDERS' EQUITY				
Preferred stock authorized and unissued				
Common stock including capital surplus	**82,332**	82,332	82,332	82,332
Retained earnings	**196,095**	194,884	205,911	197,395
TOTAL STOCKHOLDERS' EQUITY	**278,427**	277,216	288,243	279,727
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	**$645,003**	$592,972	$516,033	$438,669

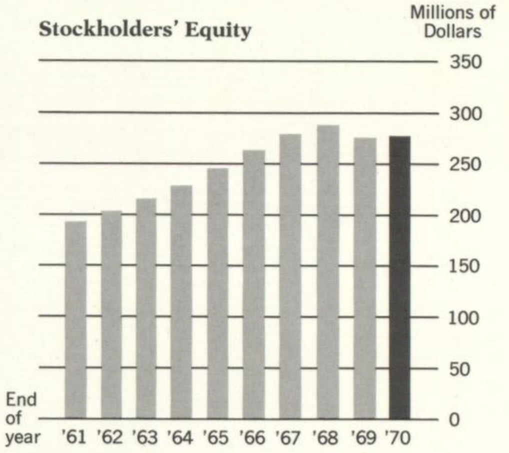
Property, Plant and Equipment

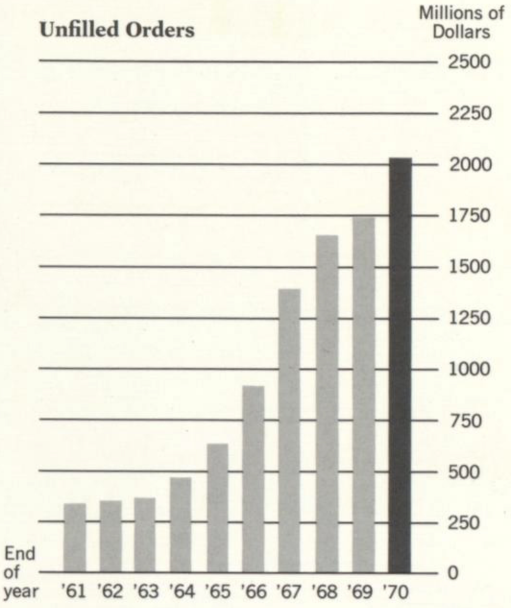
Ten-Year Comparison (in thousands of dollars)

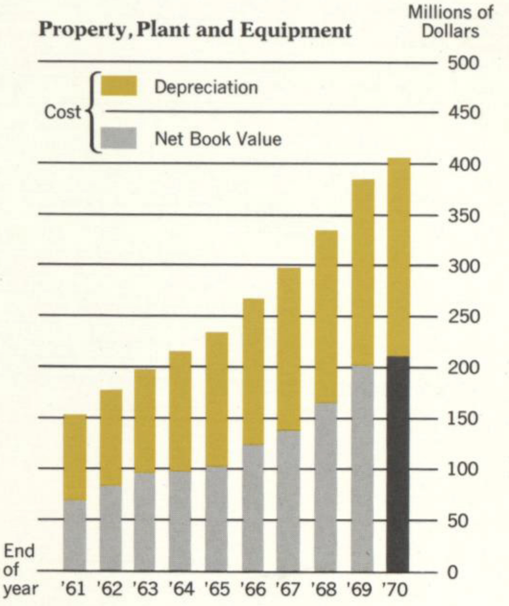
For the Calendar Year	1970	1969	1968	1967
COST				
At beginning of year	**$383,355**	$334,556	$298,317	$266,404
Expenditures during year	**25,340**	50,523	37,388	33,509
Other additions—initial consolidation of subsidiaries	**131**			444
Retired or sold during year	**(2,141)**	(1,724)	(1,149)	(2,040)
At end of year	**406,685**	383,355	334,556	298,317
DEPRECIATION AND AMORTIZATION				
At beginning of year	**180,707**	168,918	158,902	144,012
Charged to operations during year	**16,417**	13,439	10,934	16,436
Accumulated—initial consolidation of subsidiaries	**119**			247
Accumulated on property retired or sold during year	**(1,849)**	(1,650)	(918)	(1,793)
At end of year	**195,394**	180,707	168,918	158,902
NET BOOK VALUE	**$211,291**	$202,648	$165,638	$139,415

1966	1965	1964	1963	1962	1961
$ 15,830	$ 14,641	$ 10,591	$ 13,026	$ 9,169	$ 10,771
16,580	79,117	24,549	20,296	41,837	55,889
75,671	40,301	69,197	49,213	49,726	54,218
35,136	16,683	26,777	22,631	17,850	17,453
119,396	98,936	85,430	78,286	67,490	58,399
262,613	249,678	216,544	183,452	186,072	196,730
2,082	387	13,922	15,799	9,727	
447	961	1,278	2,621	868	1,044
122,392	102,476	96,365	95,473	83,679	68,406
4,851	3,292	4,379	4,971	4,759	3,930
$392,385	$356,794	$332,488	$302,316	$285,105	$270,110
$ 5,776	$	$	$	$	$ 2,200
77,056	63,866	56,867	42,546	37,550	29,380
3,824	3,368	3,056	2,622	2,434	2,443
19,236	19,044	18,911	18,433	16,215	16,183
105,892	86,278	78,834	63,601	56,199	50,206
16,600	18,800	18,800	21,000	23,200	25,400
6,700	6,212	5,342	2,218	1,476	1,375
129,192	111,290	102,976	86,819	80,875	76,981
82,332	82,332	82,332	82,332	82,332	82,332
180,861	163,172	147,180	133,165	121,898	110,797
263,193	245,504	229,512	215,497	204,230	193,129
$392,385	$356,794	$332,488	$302,316	$285,105	$270,110

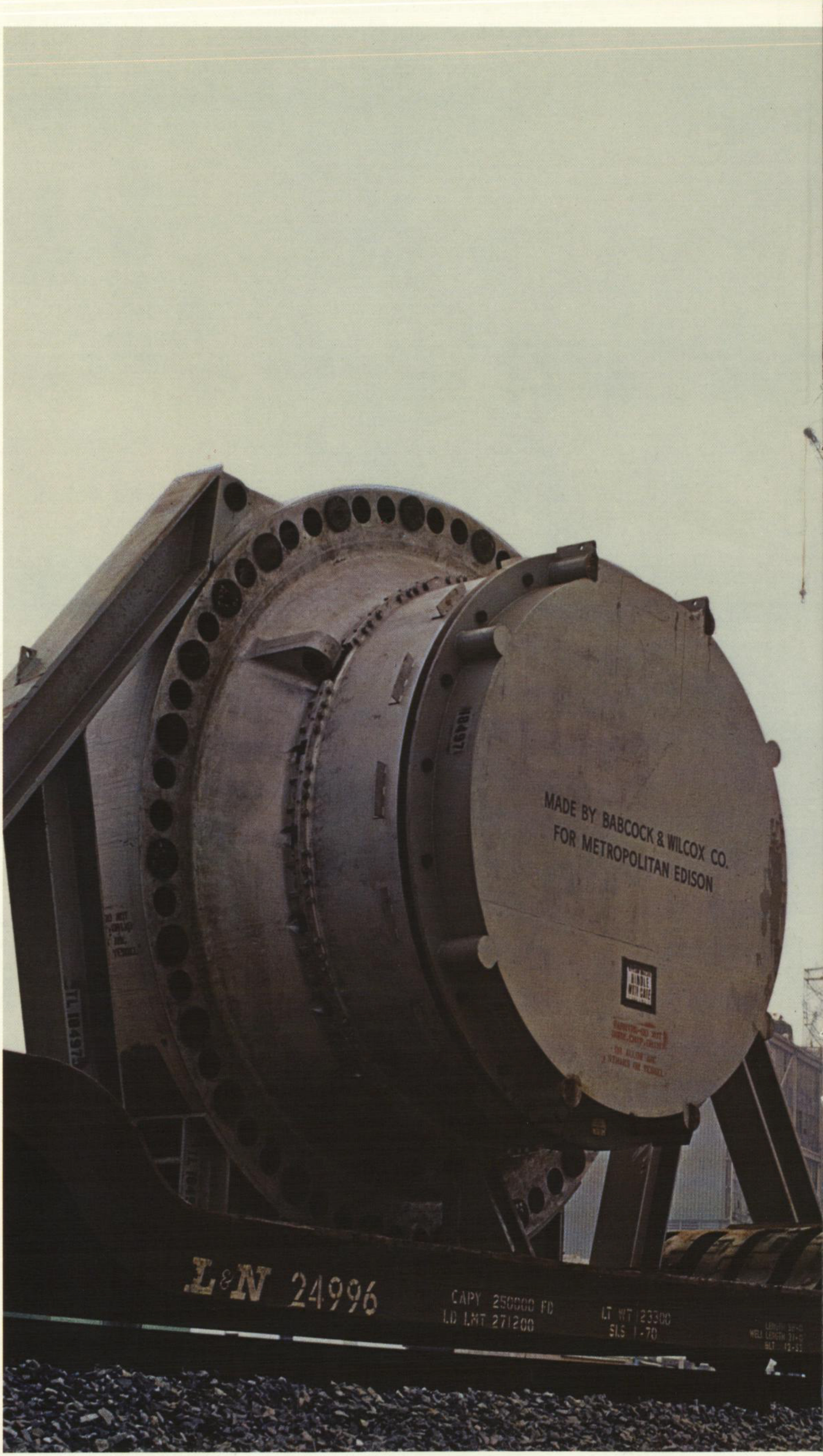
1966	1965	1964	1963	1962	1961
$232,858	$214,948	$198,827	$176,502	$151,518	$146,140
34,807	19,610	12,265	23,101	25,662	6,188
	119	5,177			
(1,261)	(1,819)	(1,321)	(776)	(678)	(810)
266,404	232,858	214,948	198,827	176,502	151,518
130,382	118,583	103,354	92,823	83,112	75,215
14,778	13,519	12,825	11,227	10,335	8,673
	29	3,613			
(1,148)	(1,749)	(1,209)	(696)	(624)	(776)
144,012	130,382	118,583	103,354	92,823	83,112
$122,392	$102,476	$ 96,365	$ 95,473	$ 83,679	$ 68,406


Stockholders' Equity


Unfilled Orders


Property, Plant and Equipment

Closure head for a reactor vessel arrives at the site of Metropolitan Edison's nuclear generating station at Three-Mile Island near Middletown, Pennsylvania. Vessel and head were shipped from the Power Generation division's Mount Vernon, Indiana plant.



Review of operations

Steam generation equipment

In 1970, the company's Power Generation division received a $77 million contract for two 1,230,000 kilowatt nuclear systems and a $97 million fuel contract from the Tennessee Valley Authority. The B&W design increases system efficiency, reduces fuel costs over the life of the units and decreases the heat transferred to cooling water thus reducing thermal pollution effects. Commercial operation of the units is scheduled for August 1977 and October 1978 respectively.

Other divisions and subsidiaries will participate in the TVA contracts. The Tubular Products division will supply 680 miles of high nickel alloy tubing for the systems. Bailey Meter Company, a subsidiary, will supply instruments and controls, including two 855 digital computer systems. Diamond Power Specialty Corporation, another subsidiary, will provide the control rod drives and closed-circuit television systems.

The award received from TVA brings to 13 the total number of B&W nuclear steam systems ordered by utilities. These systems represent a cumulative capacity of more than 12 million kilowatts of electricity.

All B&W-manufactured components for the first of three units for Duke Power Company's $341 million Oconee nuclear station in South Carolina have arrived at the site. The reactor vessel for the second unit was shipped in November and the two steam generators for this unit will be shipped in early 1971.

Improved performance at the division's Mount Vernon, Indiana facility during the year resulted in the shipment of seven reactor vessels including an 825-ton unit, the largest ever produced. Nine additional reactor vessels are scheduled to be shipped by the end of 1971.

The nuclear machining and assembly facility in Barberton, Ohio, completed in 1969, became fully operational in 1970 and is a considerable asset in improving production.

At Lynchburg, Virginia, the commercial nuclear fuel plant started production in 1970 of fuel assemblies for Duke Power's first Oconee reactor. The plant is fully operational and is performing as expected.

Nuclear fuel control rod guide assemblies are test assembled in a reactor vessel simulator stand in the Power Generation division's nuclear machining and assembly facility at Barberton, Ohio, prior to shipment.

The sale of "control odor" process recovery boilers to the pulp and paper industry is steadily climbing as environmental considerations become a greater factor in plant operations. Part of the 36 miles of tubing required in this type of boiler is shown during installation at the Old Town, Maine plant of Diamond International Corporation's subsidiary, Penobscot Company.

The marketing of nuclear fuel is the most important diversification in the company's recent history. Through this activity, B&W has become a significant force in the fuel phase of the nuclear business and offers a full range of fuel procurement, fabrication and management services. The current backlog of commercial fuel orders amounts to more than $390 million.

In the fossil fuel steam field, the division has a full production schedule for shipment of utility fossil fuel steam systems in 1971 and is booked to near capacity for shipments in 1972.

In the marine market, deliveries of 16 boilers were made for two new types of barge-carrying ships and four boilers for the largest container ships ever built in the United States.

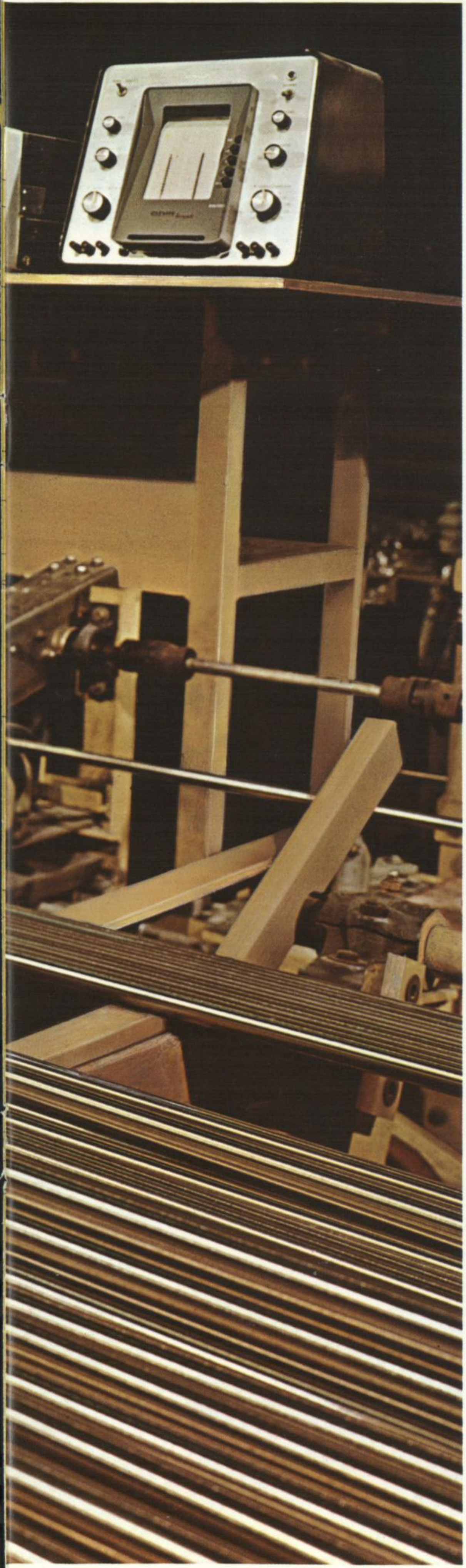
The pulp and paper industry, a steadily growing segment of the nation's economy, is rapidly accepting B&W's "control odor" process for recovery boilers. Sales of these units continued high in 1970 and future sales are expected to climb as environmental considerations become an even greater factor in plant operations.

The manufacture of pollution control products is a rapidly developing activity and the division is working on several types of systems aimed at reducing sulfur oxides from stack gases. One is a limestone wet scrubbing system, the first sale of which was made in 1970 to a major electric utility. The contract includes engineering and equipment furnished by the division with the Diamond Power and Bailey subsidiaries providing components, and the B&W Construction Company doing the erection. Several other utilities are reviewing proposals for this system.

Another method of sulfur dioxide control is a wet magnesia scrubbing process being developed under sponsorship of the U.S. Department of Health, Education and Welfare. This recovers sulfur in a usable form. A third method is being developed by Babcock & Wilcox and Esso Research & Development Corporation and is sponsored by 16 electric utilities.

In Canada, orders for power generation equipment increased sharply. Babcock & Wilcox Canada Ltd., located in Galt, Ontario, booked the largest volume of conventional and nuclear steam equipment in its history. The most sizeable orders, totalling $67 million, came from Ontario Hydro—for fossil fuel

Electronic testing equipment is used to analyze high nickel alloy nuclear tubing at Tubular Products division. The tubing is made to extraordinary quality standards for use in steam generators for B&W nuclear steam systems.
A system requires 340 miles of tubing.



boilers for its Nanticoke station and heat exchangers and other components for the Bruce nuclear station. The Canadian pulp and paper industry has purchased six "control odor" process recovery boilers to date—five of them from B&W Canada Ltd.

This subsidiary also experienced growth in the sale of pumps. B&W Canada pumps are sold to utilities throughout North America for both conventional and nuclear applications and to the pulp and paper as well as other industries.

Tubular products

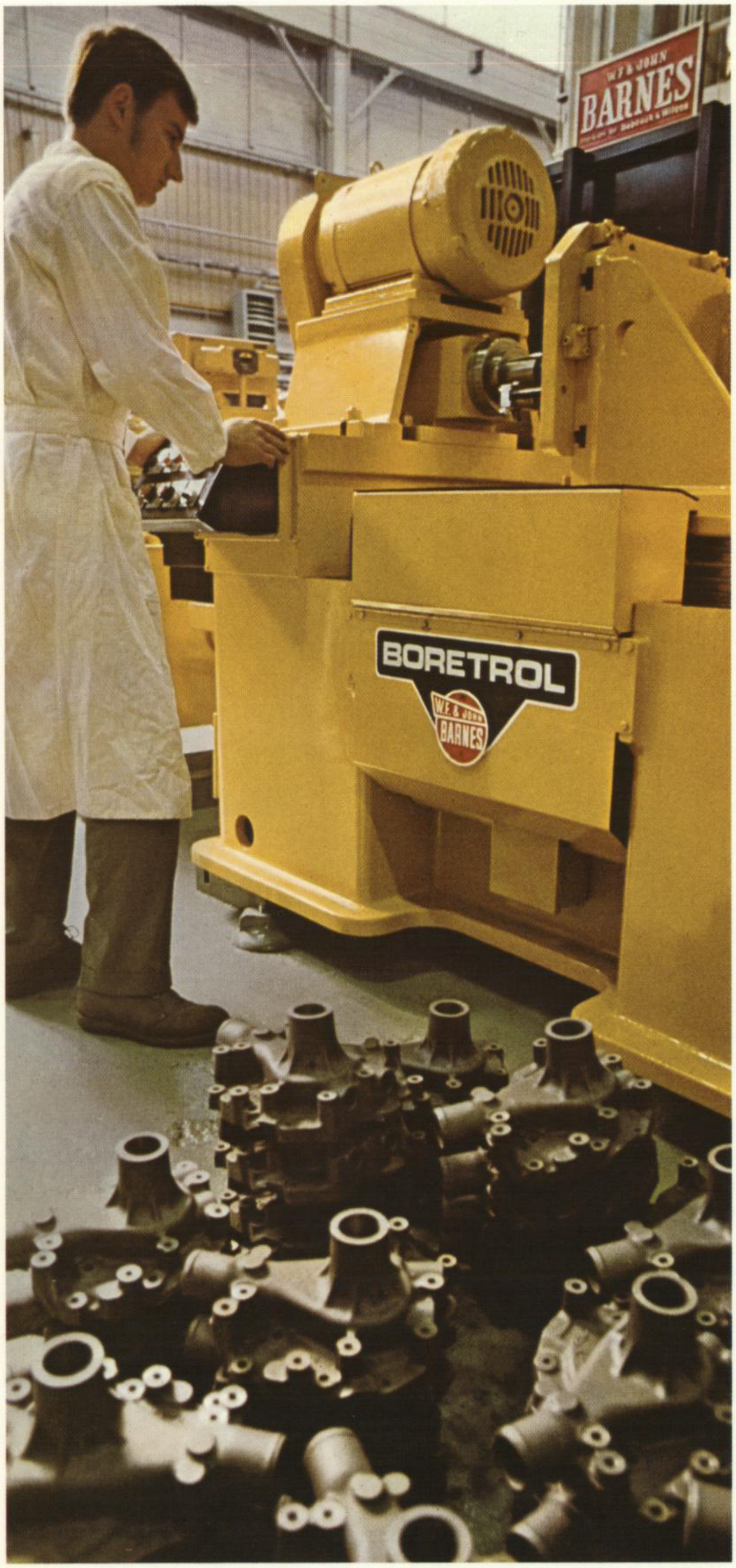
The Tubular Products division's performance was affected by unstable economic conditions during the second half of the year as well as by the high cost of scrap and the impact of a major automotive work stoppage. This was partly offset by the high degree of acceptance of the division's products in growing industrial markets—chemical, oil and gas, transportation, construction, metalworking and machinery. B&W seamless and welded tubing, fittings and extrusions enjoy a high reputation for their quality, reliability and availability. While extensive integrated production facilities help to maintain competitiveness, foreign competition has made inroads into some types of B&W tubing.

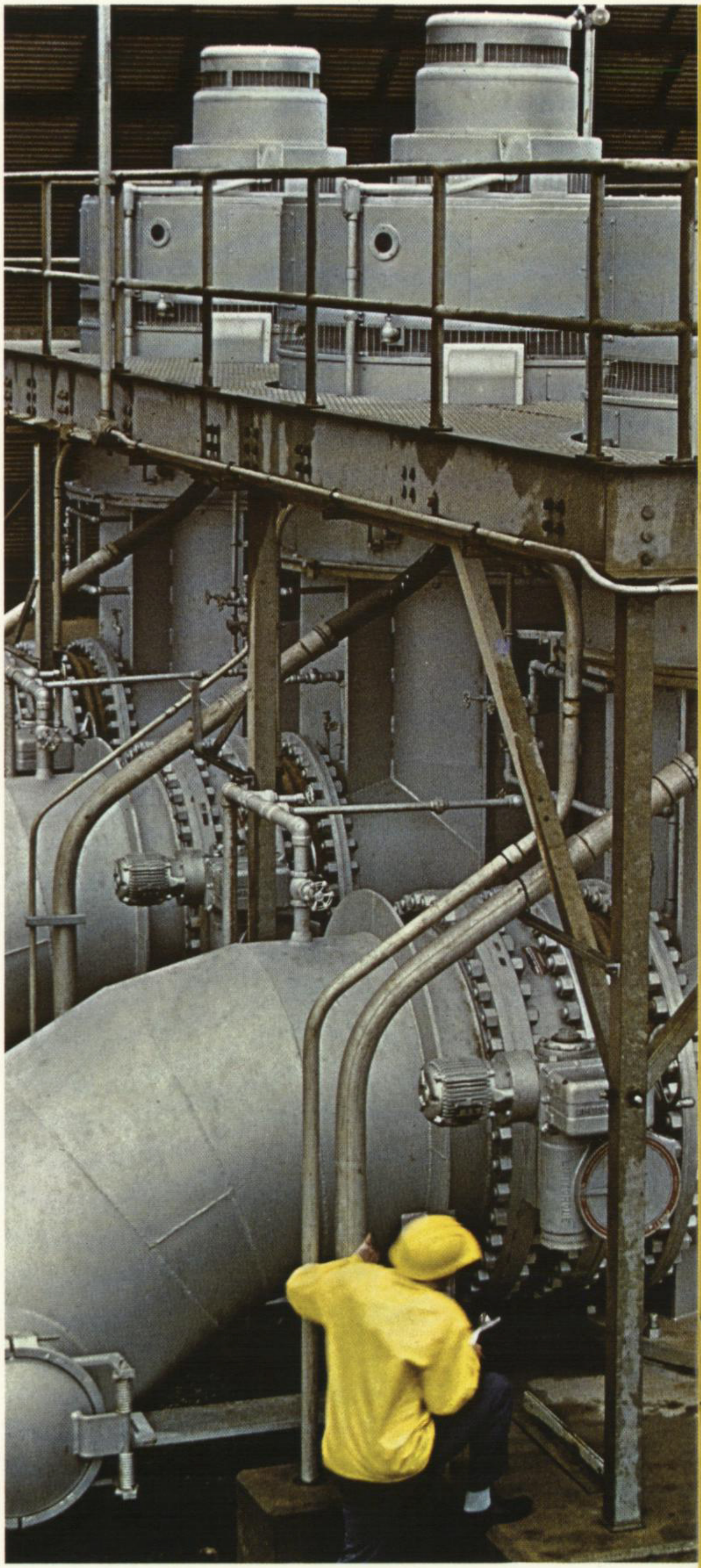
A growing market for hydraulic and pneumatic cylinders is now better served as a result of the division's "straight-bore" tubing. First introduced in 1969, it is a seamless steel tube with unusual inside straightness which reduces or entirely eliminates the cost of boring and increases cylinder life.

Automated machines

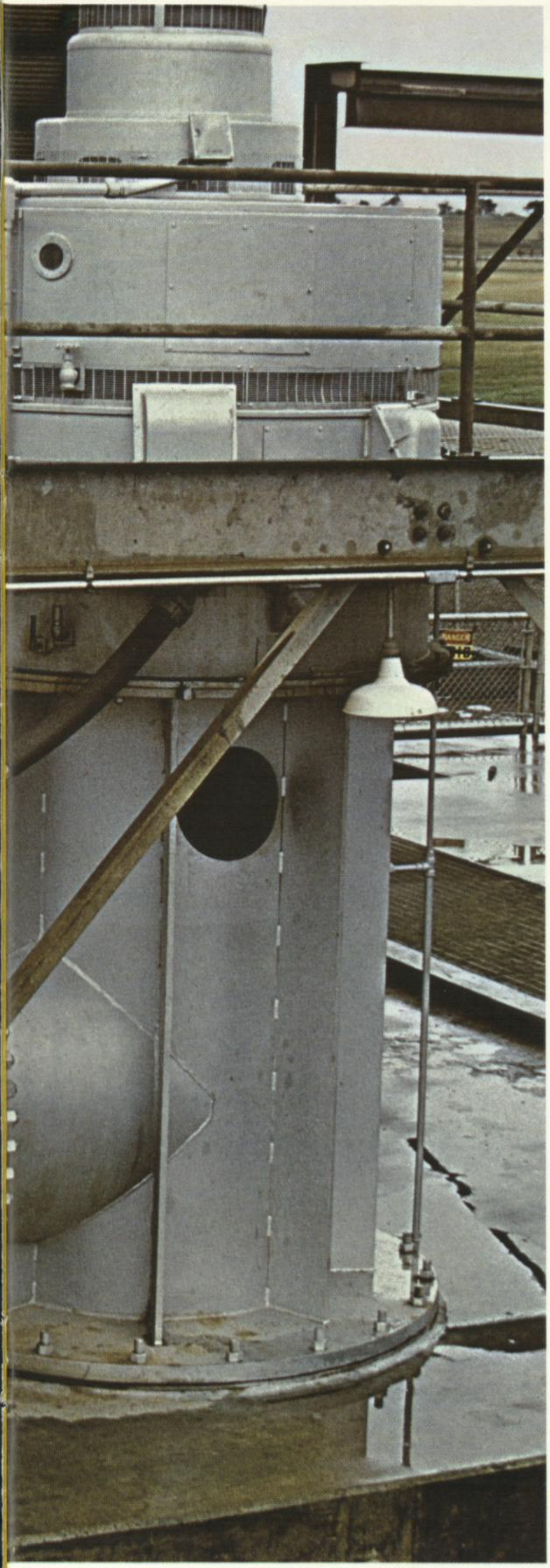
The machine tool industry declined along with the economy during the year, reflecting lowered demand for metalworking machinery and systems. The Automated Machine division, however, received a good share of the available market for its specially engineered products.

Considerable development activity in 1970 led to the introduction of new equipment. At Detroit Broach, a unit of the division, continuous broaching equipment, already among the best known, was improved by the addition of automatic loading. And a new plant for producing broach cutting tools





W. F. & John Barnes, a unit of the Automated Machine division, produced its first standard machine tool, a precision boring machine called the Boretrol. Traditionally a custom machine tool builder, Barnes is extending its effort into a broader metalworking market.



Circulating pumps manufactured by Babcock & Wilcox Canada Ltd. are shown installed at a U.S. utility station in the midwest. During 1970, the Canadian subsidiary experienced growth in pump sales to utilities throughout North America for both nuclear and conventional power plants.

was placed in operation in Ponce, Puerto Rico. Detroit Broach also continued as the leading supplier of tracer lathes in the automotive and related fields.

The W. F. & John Barnes unit, heretofore a producer of specialized custom machinery, introduced its first standard machine tool, a precision boring machine. Barnes also received a contract for a transfer line for producing the 1972 model of a major luxury car engine. In spite of lowered demand within the industry during 1970, this unit maintained a sales volume comparable to 1969.

Barnes and Detroit Broach teamed up to jointly produce a highly efficient automatic machining line to be used for the production of disc brake components. Consisting of broaching equipment and a transfer line, it contains automatic tool size control and includes automated loading, unloading, storage and retrieval of parts.

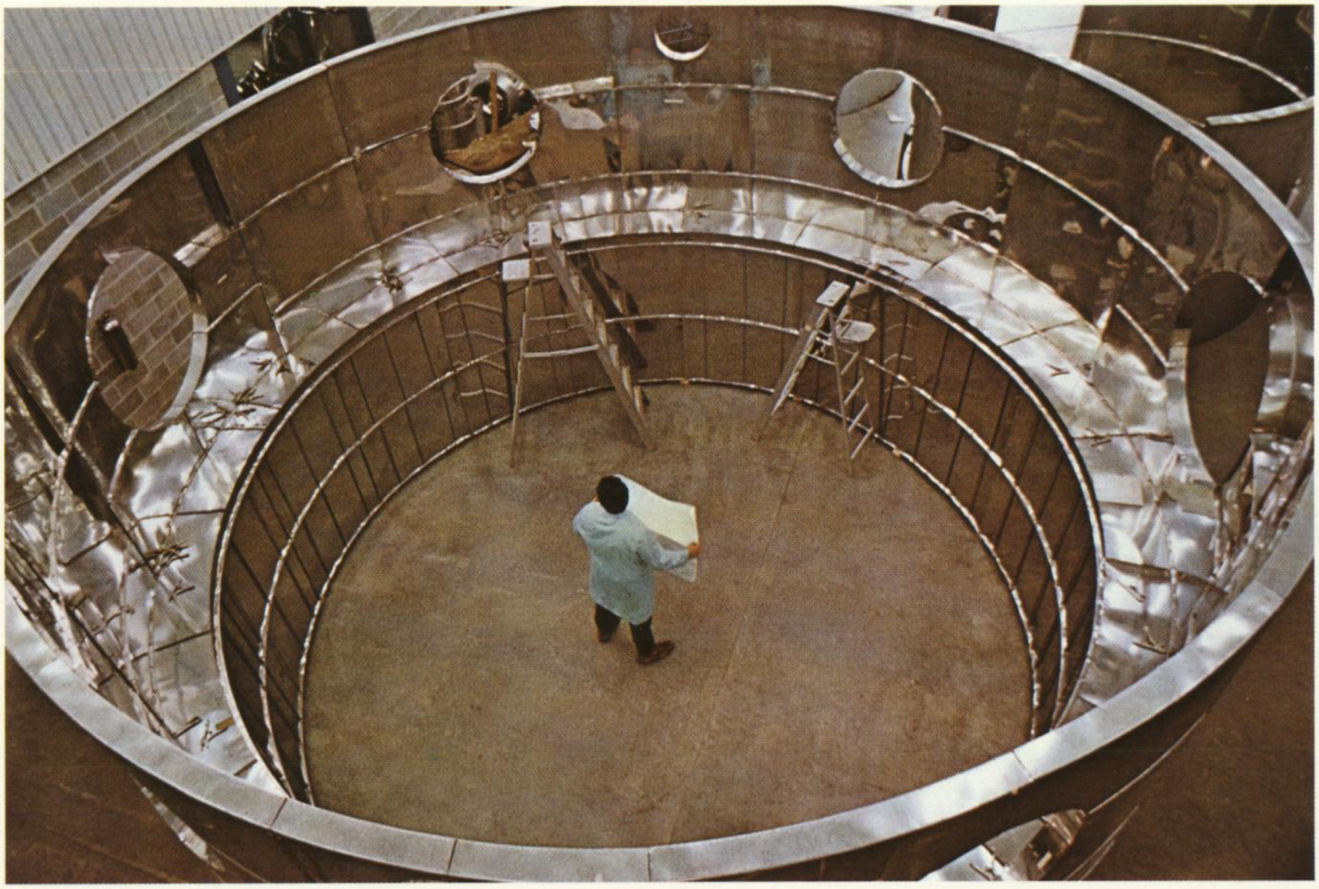
Century-Detroit, another unit of the division, supplied sophisticated internal grinders for manufacturing aircraft landing gear and parts for off-the-road construction equipment.

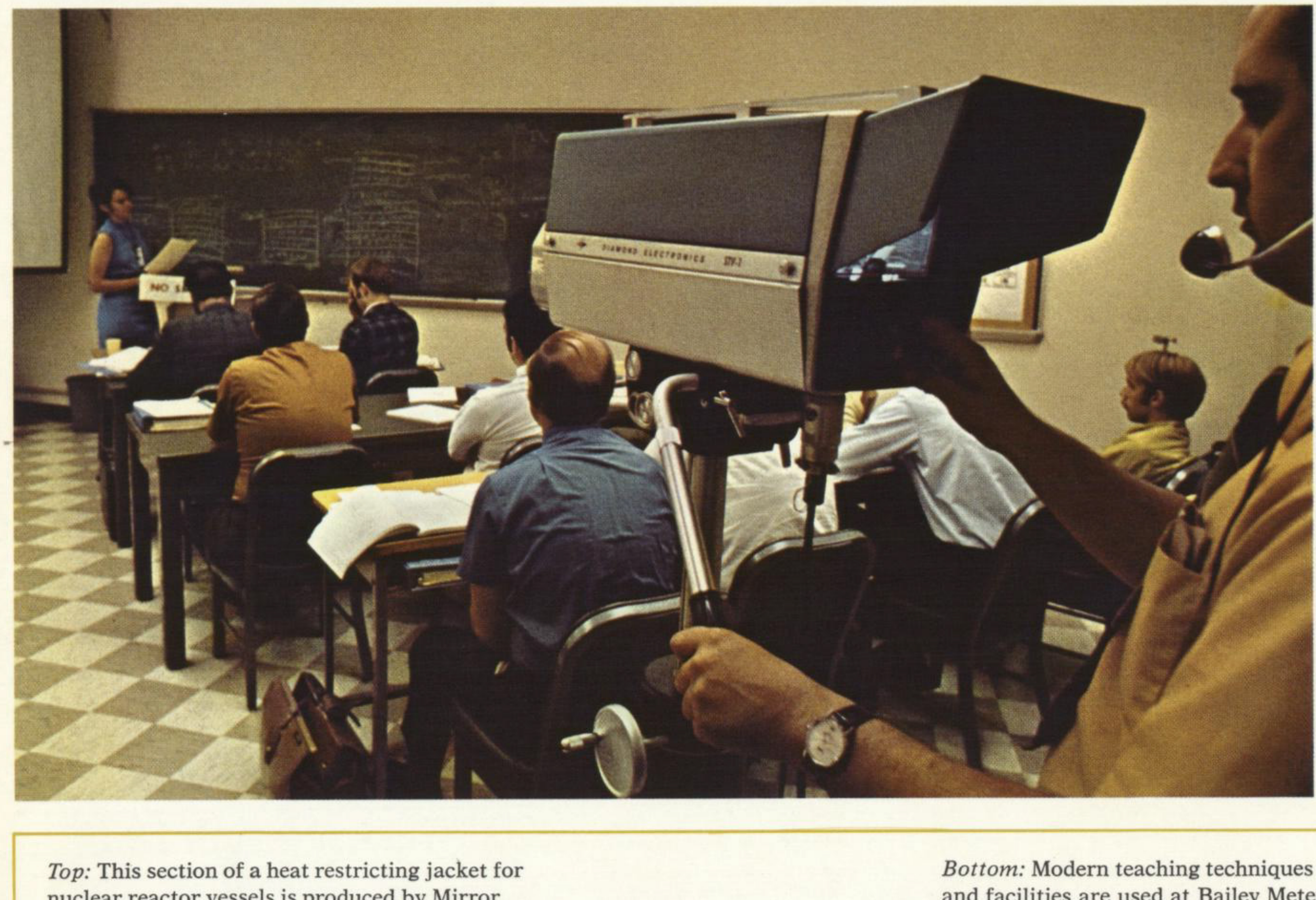
Control equipment and systems

Bailey Meter supplies measurement and control equipment to several diverse industries. Bailey computers are widely used in stationary and marine power plants, and 10 Bailey 855 computers have been sold for nuclear generating plants. Recently, the Bailey 855 digital computer was applied in a systems approach to the control of electric furnace steelmaking. Another first for Bailey was the installation of this computer in 1970 for testing engines for a major truck manufacturer. It is the first digital system for production engine testing ever installed.

One of the most promising products Bailey placed on the market in 1970 was its solid state pressure transmitter. This product has no moving mechanical parts and is less expensive than competitive pressure transmitters used throughout industry for the measurement of air or hydraulic pressure.

In another new product area, Bailey has under development fluidic control devices which use air flow as a medium and offer certain advantages in control capability over other methods. A fluidic device has no moving parts and is particularly applicable to automatic machinery under





Top: This section of a heat restricting jacket for nuclear reactor vessels is produced by Mirror Insulation, a unit of B&W's Diamond Power subsidiary. The jacket is built of scores of panels which can be removed to facilitate inspection of the vessel. Each panel has an outer and inner case of stainless steel lined with layers of sheet aluminum or stainless steel separated by air spaces.

Bottom: Modern teaching techniques and facilities are used at Bailey Meter Company's headquarters at Wickliffe, Ohio to train customers' personnel in the theory and operation of Bailey measurement and control equipment.

operating conditions too severe for standard electrical controls. A multi-element system employing fluidic devices is currently being installed for burner automation in a marine boiler. Additional orders on hand indicate that this form of control will gain a significant share of a sizeable market.

Diamond Power's boiler cleaning equipment was in strong demand during 1970 and this along with increased activity in metallic insulation and nuclear control rod drives, made the year one of record shipments. Near record bookings were made for the year and there are good prospects for continued high volume in all of Diamond's product lines.

By consolidating its domestic production operations at expanded facilities in Lancaster, Ohio in 1970, Diamond achieved greater efficiency and more effective use of its manufacturing and office space.

Refractories

Refractory sales set a new high for the second consecutive year. This was accomplished through greater penetration of existing markets, particularly in insulating firebrick, special dense refractories, ceramic fiber and entry into new markets.

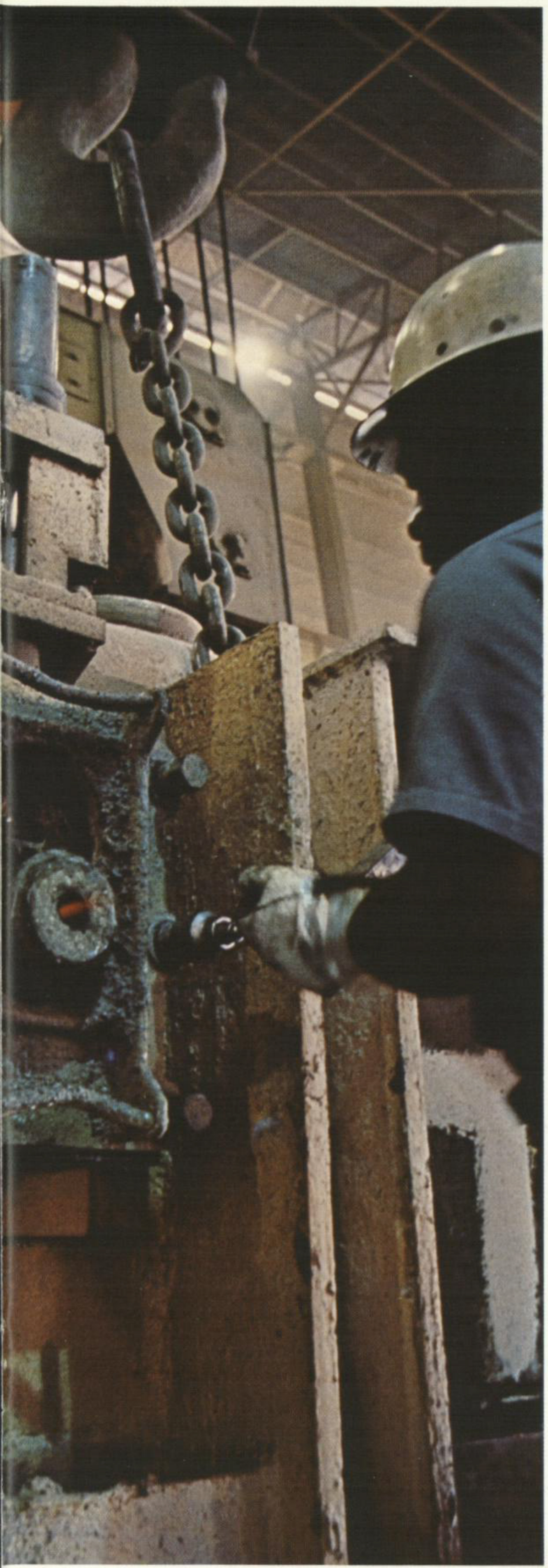
A new product, refractories for sliding gate valves, was introduced to the steel industry. The valve mechanism is used to control the pouring of steel in the continuous casting process and offers improved operation over traditional methods. With the growth expected in continuous casting facilities for the steel industry, this product holds considerable promise for increased refractory sales.

B&W Kaowool, the Refractories division's versatile ceramic fiber, reached new sales levels in all product forms and the outlook for continued expansion of sales is excellent. Added facilities are currently being installed in Puerto Rico for production of Kaowool, and vacuum forming equipment has been installed in the Canadian plant.

Naval nuclear fuel

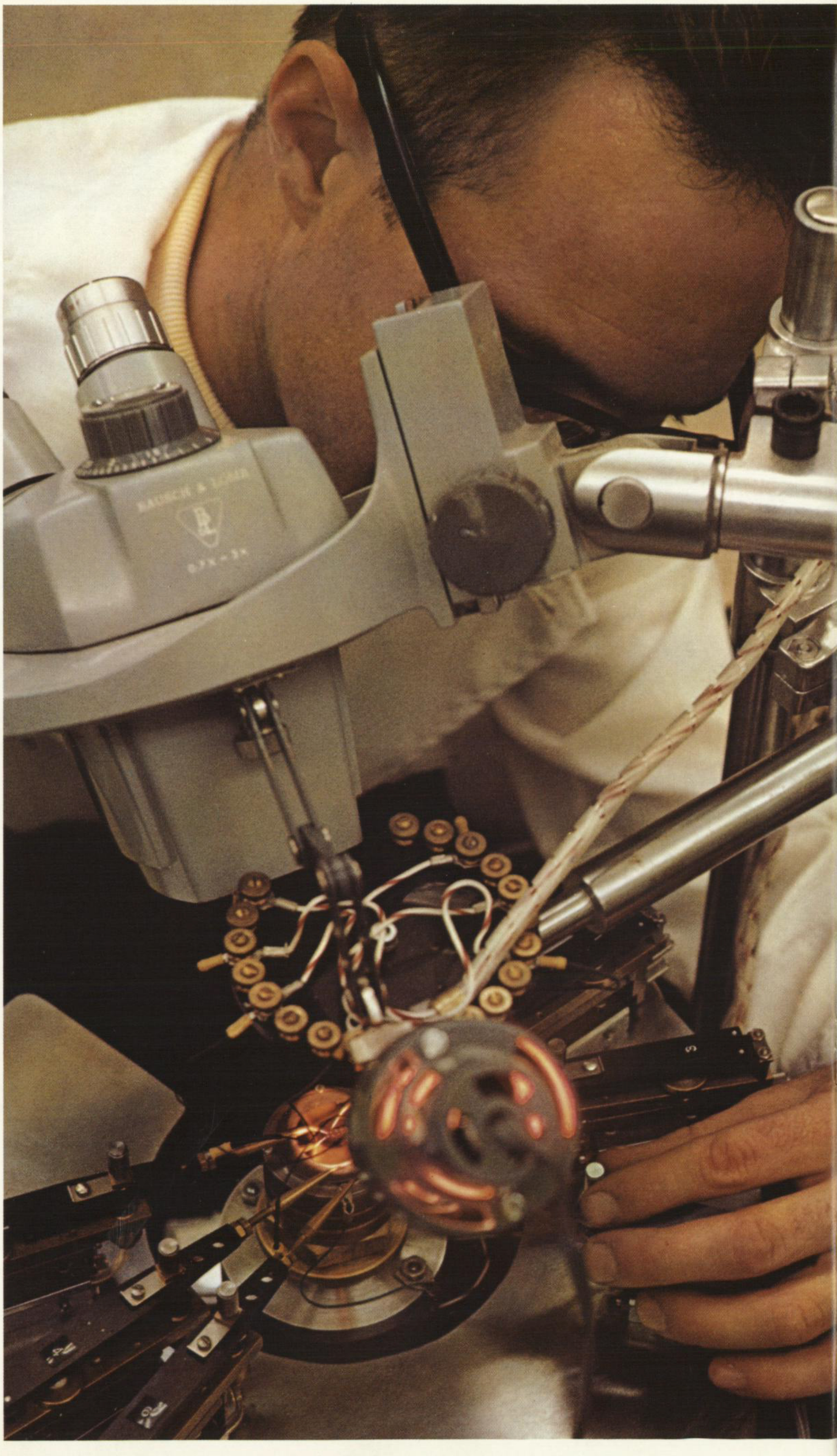
As a leading producer of nuclear fuel for the U.S. Navy, B&W maintained a record of excellent performance through continuous improvement of manufacturing and management techniques. As a typical example, the division has developed a computerized and automated system for verification of dimensional characteristics on fuel elements.

Shipments from the Naval Nuclear Fuel division increased during 1970 over the previous year and an even higher level is expected for 1971.



A refractory sliding gate valve used to control steel pouring in the continuous casting process was introduced during the year. Offering improved operation over traditional methods, this product holds considerable promise for future sales growth.

Work on a silicon pressure transmitter accomplished by the Research and Development division permitted Bailey Meter Company to place the product on the market during 1970.



Research and development

Both product and process development continue to be emphasized throughout the company. To this end a close interrelationship exists between the operating units of B&W and its Research and Development division.

The division operates two facilities, the Research Center in Alliance, Ohio, and the Lynchburg Research Center at Lynchburg, Virginia. At these centers, scientists, engineers and technicians conduct research programs to enhance B&W's position in both the industrial and utility marketplace and to provide operations research services to improve the operating effectiveness of the divisions and subsidiaries.

An example of R&D's contribution to the company's technological resources is the large multidisciplined program designed to continuously improve the performance and flexibility of B&W nuclear steam system components such as steam generators, reactor vessels and fuel assemblies.

Other technological innovations are being refined into possible new products for various divisions. One development depends upon light transmission technology to measure amounts of air pollutants such as sulfur and nitrogen oxides and airborne particles. Another product area under development is nuclear reactor instrumentation and protective systems. These measure and control the amount of radiation within a reactor core.

The Operations Research (OR) group contributes to increasing the effectiveness of the operating divisions and subsidiaries. Specialists in OR have assisted the divisions in making improvements in manufacturing and quality control in various production facilities. Also, the OR group is increasingly called upon to apply new scientific techniques to the management function. These include information transfer and the allocation of manpower, machines and resources. In one instance, a computerized long-range planning system was successfully applied to the scheduling of nuclear component manufacturing. In another case, optimum procedures for tube manufacture were determined and are now yielding substantial annual savings.

Concern with the quality of the environment and the cost of meeting ever-higher standards imposed in the marketplace make it mandatory that the successful company mount a sizeable research and development effort. Thus B&W has committed considerable capital and highly-trained manpower to the exploration of areas of challenge and the pursuit of opportunities in its fields of science.

The Babcock & Wilcox Company

Facilities

Automated Machine Division
W. F. & John Barnes, *Rockford, Ill.*
Century-Detroit, *Detroit, Mich.*
Detroit Broach & Machine
Rochester, Mich. · Greer, S.C. ·
Ponce, Puerto Rico

Naval Nuclear Fuel Division
Lynchburg, Va.

Power Generation Division
Barberton, Ohio · Brunswick, Ga. ·
Canton, Ohio · Lynchburg, Va. ·
Mount Vernon, Ind. · Paris, Texas ·
West Point, Miss. · Wilmington, N.C.

Refractories Division
Augusta, Ga. · Hephzibah, Ga.
Standard Refractories Limited
Burlington, Ont., Canada

Research and Development Division
Alliance, Ohio · Lynchburg, Va.

Tubular Products Division
Alliance, Ohio · Beaver Falls, Pa. ·
Elkhart, Ind. · Milwaukee, Wis.
Babcock & Wilcox Tubular Products
Limited, *Toronto, Ont., Canada*

Babcock & Wilcox Canada Ltd.
Galt, Ont., Canada

Bailey Meter Company
Cleveland, Ohio · Wickliffe, Ohio
Belfab, *Daytona Beach, Fla.*
Bailey Meter Australia Pty. Limited
Regents Park, N.S.W., Australia
Bailey Meter Company Limited
Pointe-Claire, Que., Canada
Fibras Ceramicas Inc., *Ponce, Puerto Rico*

Diamond Power Specialty Corporation
Lancaster, Ohio
Mirror Insulation
Lancaster, Ohio
Diamond Canapower Ltd.
Burlington, Ont., Canada
Diamond Power Specialty Limited
Dumbarton, Scotland
Diamond Superior AB
Sundbyberg, Sweden

Products

Air Pollution Control Systems
Combustion Control Systems · Filter Systems · Gas Absorption Systems · Smoke and Dust Density Recorders · Wet Scrubber Systems · Limestone Scrubber Systems

Nuclear Energy Services
Fuel Management Services · Advanced Fuels Development · Irradiation and Hot Cell Services · Nuclear Operations Management Training

Automation Equipment and Control Systems
Computers and Information Systems for Industrial Processes · (Closed-Circuit) Television Systems

Machine Tools and Related Products
Hydrostatic Bearings · Precision Boring Machines · Broaching Machines and Broaches · Large I.D. Grinders · Hydraulic Accessories · Production Tracer Lathes · Numerical Control Machines · Special Machines · Transfer or Multiple-Station Machines

Power Generation Equipment
Complete Nuclear and Fossil-Fuel Fired Steam Generating Systems · Nuclear Fuel · Industrial Steam Generating Equipment · Marine Boilers · Regenerative and Tubular Air Heaters · Cleaning Systems for Heat Transfer Surfaces · Control and Performance Computers · Automatic Controls and Instruments · Nuclear Reactor Control-Rod Drives · Superheaters · Economizers · Coal Feeders · Water-Level Gauges

Refractories Products
Kaolin Clays · Ceramic Fibers · Insulating Firebrick · Specialty Firebrick · Plastics, Mortars, Castables, Ramming Mixes and Calcines · Special Oxide Refractories · Silicon Carbide

Special Equipment
Precision Welded Bellows · Alloy Castings · Pulverized-Coal Injection Systems for Blast Furnaces · Hollow Forgings for Steam Piping and Other Uses · Tubular Hoods for Basic Oxygen and Electric Furnaces · Reflective Metallic Thermal Insulation · Heavy Pressure Vessels and Heat Exchangers · Centrifugal Pumps · Recovery Processes for the Pulp Industry · Stud Tensioners

Tubular Products
Stainless, Alloy or Carbon Steel Seamless and Welded Tubes and Pipe for all Types of Pressure and Mechanical Applications · Extrusions—Tubular and Solid Shapes · Welding Fittings and Flanges · Seamless Rolled Rings

The Babcock & Wilcox Company *Incorporated in 1881 from a partnership formed in 1867.*

Board of Directors

M. Nielsen, *Chairman*
George G. Zipf, *President*

W. O. Baker
John L. Burns
R. J. Cantwell
*Walther H. Feldmann
Donald N. Frey
*J. Roy Gordon
George C. Kern, Jr.
James C. Parlee
B. A. Tompkins
W. L. Wearly
Samuel H. Woolley

**Honorary Director*

Corporate Officers

President and Chief Executive Officer
George G. Zipf

Vice Presidents

R. J. Cantwell
Carl Claus
R. H. Harrison
G. W. Kessler
G. W. Kross, Jr.
W. H. Rowand
C. T. Smith
A. P. Taber
L. B. Wohlgemuth

Controller
H. D. Kenney

Treasurer
W. P. Catterson

Secretary
Martin Victor

George G. Zipf
President and Chief Executive Officer

Services

Finance and Accounting Division
R. J. Cantwell
Vice President

Research and Development Division
H. H. Poor
Division Vice President

Staff Division
Carl Claus
Vice President

Washington, D.C. Office
R. H. Harrison
Vice President

Operating Divisions

Automated Machine Division
J. D. Stephens
Division Vice President

Naval Nuclear Fuel Division
W. M. Vannoy
Division Vice President

Power Generation Division
A. P. Taber
Vice President

Refractories Division
R. P. Stuntz
Division Vice President

Tubular Products Division
G. W. Kross, Jr.
Vice President

Subsidiaries

Bailey Meter Company
J. H. Dennis
President

Diamond Power Specialty Corp.
W. H. Jackson
President

Babcock & Wilcox Canada Ltd.
J. M. Douglas
President

General Offices
161 East 42nd Street
New York, N.Y. 10017

Stock Transfer Agent
Bankers Trust Company
16 Wall Street, New York, N.Y. 10015

Registrar
The Bank of New York
48 Wall Street, New York, N.Y. 10015

General Counsel
Sullivan & Cromwell
48 Wall Street, New York, N.Y. 10005

Independent Accountants
Price Waterhouse & Co.
60 Broad Street, New York, N.Y. 10004

Stock Listed
New York Stock Exchange and
Pacific Stock Exchange

Notice to Stockholders

The Annual Meeting of Stockholders will be held at 10 A.M., Wednesday, April 28, 1971, in the Biltmore Hotel, New York City. A formal notice of the meeting with a proxy statement and form of proxy will be mailed to each stockholder March 19.

The Babcock & Wilcox Company Annual Report 1970